

Product datasheet for **MR223494**

Map2k2 (NM_023138) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Map2k2 (NM_023138) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Map2k2
Synonyms:	AA589381; MEK2; MK2; Prkmk2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR223494 representing NM_023138 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGGCCCGGAGGAAGCCGGTGTACCGGCACTCACTATCAACCTACCATCGCCGAGGGCCCGTCCC
CCACCAGCGAGGGCGCCTCTGAGGCAAACCTGGTGGACCTCCAGAAGAAGCTGGAAGAGCTGGACCTGGA
TGAGCAGCAAAGGAAGCGGCTGGAGGCCTTCTTACCCAGAAGGCTAAGGTCGGTGAGCTCAAGGACGAC
GACTTTGAGAGGATCTCAGAGCTGGGTGCCGCAATGGCGGAGTGGTCACCAAGGCCCGCATAGGCCGT
CAGGCCTCATCATGGCCAGAAAGCTGATCCACCTGGAGATCAAACCGGCCGTGCGCAACCAGATCATCCG
GGAGCTGCAGGTGCTGCACGAGTGCAACTCGCCCTACATCGTGGGCTTCTATGGGGCCTTCTACAGCGAC
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GCACCAGATCATGCACAGAGATGTGAAGCCCTCCAACATCCTGGTGAACCTCTCGCGGGGAGATTAAGCTG
TGTGACTTCGGGGTGAGCGGCCAGCTGATCGACTCCATGGCCAACTCGTTTGTAGGGACGCGCTCCTACA
TGTCCCAGAGCGGCTGCAGGGCACCCACTACTCTGTGCAGTCGGACATCTGGAGCATGGGGCTGTCGCT
GGTGGAGCTGGCCATCGGGAGGTATCCCATTCCCCACCTGATGCCAAGGAAGTAGAGGCCAGCTTTGGC
CGGCCTGTGGTGGACGGGCGAGCGGAGAACCCATAGTGTCTCCCCGAGGCCAGGCCCCCTGGACGCC
CCATCAGTGTAGGTCATGGGATGGACAGCGACCGGCCATGGCCATCTTTGAGCTGCTGGACTACATAGT
GAACGAGCCACCTCCCAAGCTGCCAGTGGTGTGTTTCACTCAGACTTCCAGGAGTTTGTGAATAAATGT
CTCATTAAGAACCAGCAGAGCGAGCAGATCTGAAGCTGCTGATGAACCACGCCTTCATCAAGCGCTCTG
AGGGGGAGGAAGTGGACTTCGCCGGCTGGCTGTGCAGAACCTGCGGCTGAAGCAGCCAGCACACCCAC
GCGGACTGCAGTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR223494 representing NM_023138
 Red=Cloning site Green=Tags(s)

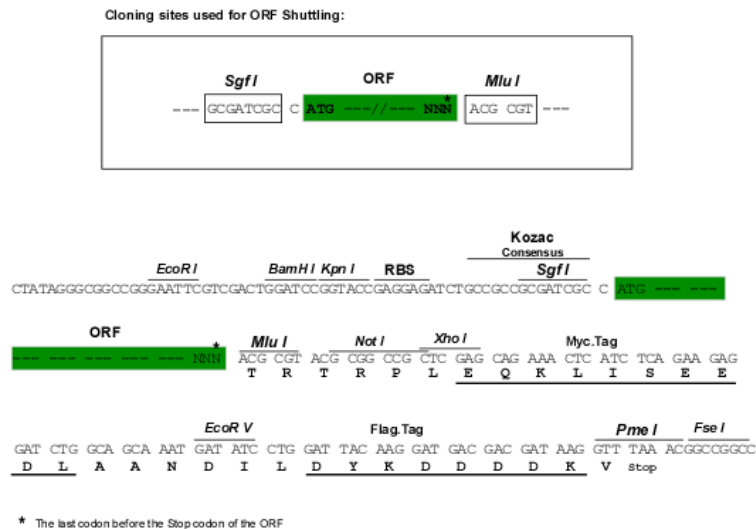
MLARRKPVLPALTINPTIAEGPSPTSEGASEANLVDLQKKLEELDLDEQQRKLEAFLTQKAKVGELKDD
 DFERISELGAGNGGVTKARHRPSGLIMARKLIHLEIKPAVRNQIIRELQVLHECNSPYIVGFYGAIFYSD
 GEISICMEHMDGGSLDQVLKEAKRIPEDILGKVSIAVLRGLAYLREKHQIMHRDVKPSNILVNSRGEIKL
 CDFGVSGQLIDSMANSFVGTRSYMSPERLQGTHYSVQSDIWSMGLSLVELAIGRYPIPPDAKELEASFG
 RPVVDGADGEPHSVSPRPPGPRPISVGHGMDSRPAMAFELLDYIVNEPPPKLP SGVFSSDFQEFVNKC
 LIKNPAERADLKLLMNHAFIKRSEGEVDFAGWLCRTLRLKQPSTPTRTAV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9010_d02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_023138

ORF Size: 1203 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_023138.5](#)

RefSeq Size: 2387 bp

RefSeq ORF: 1206 bp

Locus ID: 26396

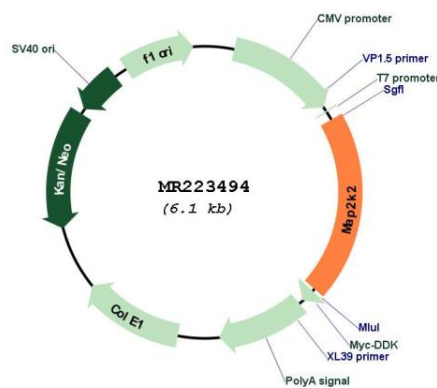
UniProt ID: [Q63932](#)

Cytogenetics: 10 39.72 cM

MW: 44.9 kDa

Gene Summary: Catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in a Thr-Glu-Tyr sequence located in MAP kinases. Activates the ERK1 and ERK2 MAP kinases. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR223494